Appl. No. 10/743,511 Amdt. Dated October 26, 2005 Response to Office Action of September 9, 2005

Amendments to the Drawings:

The attached drawing sheets include changes to Figures 2, 3A and 3B. In particular, the legend "(prior art)" is added to the Figures 2, 3A and 3B as requested by the Examiner.

Attachment: A complete set of replacement sheets which include the changes noted immediately above.

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REMARKS/ARGUMENTS

Applicants have received the Office action dated September 9, 2005, in which the Examiner: 1) objected to the title; 2) objected to the specification for informalities; 3) objected to Figures 2-3A,B; 4) objected to claim 14 as allegedly vague; 5) rejected claims 9-10, 14, 16-17 and 19-20 as allegedly anticipated by Sezginer (U.S. Pat. No. 5,510,712); 6) rejected claims 12-13, 15 and 18 as allegedly obvious over Sezginer in view of Chen (U.S. Pat. No. 6,191,588); and 7) objected to claim 11 as dependent upon a rejected base claim, but otherwise allowable.

With this Response, Applicants amend claims 9-14, cancel claims 1-8 and 21-32, and present new claims 33-37. Reconsideration is respectfully requested.

I. CLAIM CANCELLATIONS IN RESPONSE TO RESTRICTION

With this Response, Applicants cancel 1-8 and 21-32, which claims were withdrawn from consideration in the previous Response. This cancellation is in response to the now final restriction requirement, and is without prejudice to later asserting the claims, such as in a divisional application.

II. OBJECTION TO THE TITLE

The Office action dated September 9, 2005 objects to the title, and requests a new title. To this end Applicants suggest the following as a new title:

A FORMATION RESISTIVITY TOOL HAVING MULTIPLE DEPTHS OF INVESTIGATION

III. AMENDMENTS TO THE SPECIFICATION

With this Response, Applicants present a plurality of amendments to the specification. Applicants amend paragraphs [0008] and [0042] to make consistent the use of the references R_t, N and P. Applicants amend paragraph [0063] to utilize the reference numbers 1010 and 1420 of Figure 18. Applicants also present paragraph [0066.1] which is based on paragraph [0037] of the brief description of the drawings, and Figure 20. Finally, Applicants present paragraph [0066.2] which is based on paragraph [0038] of the brief description of the drawings, and Figure 21. No new matter is presented.

IV. OBJECTION TO THE SPECIFICATION

The Office action dated September 9, 2005 objects to the specification regarding Figures 21 and 22. In Response, Applicants present paragraphs [0066.1] and [0066.2].

V. OBJECTIONS TO THE DRAWINGS

With this Response, Applicants present replacement sheets with the legends for Figures 2, 3A and 3B as requested by the Examiner.

VI. OBJECTION TO CLAIM 14

With this Response, Applicants amend claim 14 to address the Examiner's concern.

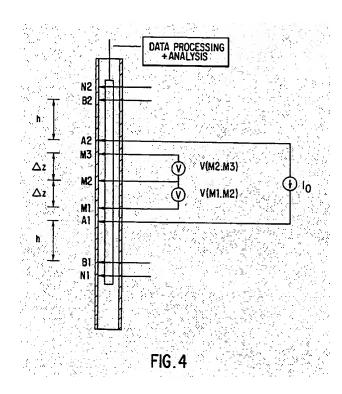
VII. EFFECTIVELY ALLOWED CLAIMS

The Office action dated September 9, 2005 objects to claim 11 as being dependent upon a rejected base claim, but otherwise allowable. With this Response, Applicants amend claim 11 to be in independent form. Claim 11 already contained these limitations by virtue of its previous dependency. Thus, claim 11, and claims 12 and 13 which now depend from claim 11, should be in a condition for allowance.

VIII. ART-BASED REJECTIONS

Claim 9 stands rejected as allegedly anticipated by Sezginer. Applicants amend claim 9 to more clearly define over Sezginer's system where the measurement electrode is between a current source and current return.

Sezginer is directed to a method and apparatus for measuring formation resistivity in cased holes. (Sezginer Title). Sezginer's Figure 4 is reproduced immediately below for convenience of the discussion.



In particular, in one mode of operation current source I_o uses electrode A1 as a current source, and electrode A2 as a current return, and the measurement electrodes are clearly between source-return pair. (Sezginer Figure 4; Col. 4, lines 5-8).

Claim 9, by contrast, specifically recites, "a first current source along said length; a first current return along said length, the first current source and first current return form a first source-return pair, wherein current from the first current source returns at the first current return; a monitor electrode along said length, the monitor electrode not between a source-return pair." Applicants respectfully submit that Sezginer does not teach or fairly suggest the limitations of claim 9. Sezginer clearly teaches the measurement electrodes to be between a current source and current return, and thus Sezginer teaches away from a system wherein "the monitor electrode not between a source-return pair."

Based on the foregoing, Applicants respectfully submit that claim 9, and all claims which depend from claim 9 (claims 10 and 14-20), should be allowed. Applicants amend claim 10 to reflect the limitations to claim 9, and amend claim 14 to address the objection noted above.

IX. NEW CLAIMS

With this Response, Applicants present new claims 33-37. Independent claim 33 is based on effectively allowed claim 11, and thus is not taught or rendered obvious by the related art.

X. CONCLUSION

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged the Conley Rose PC Deposit Account No. 03-2765.

Respectfully submitted,

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